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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,329	10/23/2001	Murray G. Sandberg	DP-300259	3591

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EXAMINER

MARTIN, ANGELA J

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/001,329

Applicant(s)

SANDBERG ET AL.

Examiner

Angela J. Martin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This Office Action is responsive to the Amendment filed on September 9, 2005. The Applicant has amended claims 7, 8, 10, and 11; and added new claims 12-14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, this action is made final.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 7-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Regarding claim 7, line 4, "welding all anode current collectors...or all cathode current collectors" is recited, whereas in lines 9-10, "welding the other of said anode current collectors and said cathode current collectors to said inside surface of said anode terminal and said inside surface of said cathode terminal, respectively..." is ambiguous. If "all" are recited in line 4, then what does "the other" of the current collectors encompass?

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-9, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitoh, U.S. Pat. No. 6,753,104 B2.

Kitoh teaches a method of manufacturing a lithium battery comprising the steps of providing a plurality of stacked lithium cells with a polymer separator (col. 5, lines 33-40); welding anode current collectors of the plurality of stacked cells to an inside surface of an anode terminal (col. 11, lines 37-50); positioning the stacked cells (col. 11, lines 37-50); and assembling the anode terminal at one end of the housing and the cathode terminal at the opposite end, wherein the cells are enclosed with the housing by the terminals (Fig. 4). It teaches ultrasonic welding (col. 11, lines 37-50). It teaches terminals are crimped to the housing, providing a seal for the terminals to the housing (Fig. 7; col. 6, lines 29-38). It teaches a valve as a gas release vent (col. 3, lines 8-12; col. 8, lines 15-22). It teaches the valve housing includes threading on its outside surface (col. 12, lines 11-15). It teaches the terminals are exposed and provide current collection along their full area (Fig. 1).

Thus, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because it would have been obvious to one of ordinary skill in the art to make the shape of the battery applicable to the device in which it would be employed.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitoh, U.S. Pat. No. 6,753,104 B2, in view of Skinlo et al., U.S. Pat. No. 6,670,071 B2.

Kitoh teaches a method of manufacturing a lithium battery as described above.

Skinlo et al., teach a method of manufacturing a battery comprising a step of inserting electrolyte into the port (col. 7, lines 22-40).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert the teachings of Skinlo et al., into the teachings of Kitoh because electrolyte would have to be inserted into the battery in order for the battery to be operable.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitoh, U.S. Pat. No. 6,753,104 B2, in view of Kawakami, U.S. Pat. No. 5,888,666.

Kitoh teaches a method of manufacturing a lithium battery as described above.

Kawakami teaches a method of manufacturing a battery wherein the housing includes end protective plastic sleeves which fit with the housing to secure and isolate the lithium cells, the sleeves serving as gaskets for the terminals (col. 14, lines 60-67; col. 15, lines 1-2; col. 16, lines 30-34).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert the teachings of Kawakami into the teachings of Kitoh because it is well known in the art to employ plastics for insulation within the battery in order to prevent short-circuiting of the device.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Enomoto et al., U.S. Pat. 6,884,541 B2, teach a lithium

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secondary battery wherein the electrode leads are attached to the electrodes by ultrasonic welding.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-1288. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AJM



**PATRICK JOSEPH RYAN**  
**SUPERVISORY PATENT EXAMINER**